

# Panasonic

# AJ-SD755

DVCPRO Studio Editing VTR  
(NTSC:525)



*IEEE1394, SDI and SDTI Capability*  
*DV Format Recording and Playback*  
*Editing Functions with Jog & Shuttle Dial*

**DVC PRO**



## DV Format Recording and Playback

The AJ-SD755 DVCPRO VTR offers DV-Format recording. The AJ-SD755 also plays back mini-DV camcorder tapes utilizing the supplied standard accessory, the AJ-CS455 cassette adapter. Recording and playback are possible on both Standard and mini-DV cassettes for extended time applications. In both recording and playback, a cassette detection function automatically selects the proper mode for the type of cassette loaded.

\*The AJ-SD755 cannot playback DV cassette tapes recorded in LP mode, or extended-time Mini-DV cassette tapes (80 minutes in SP mode, 120 minutes in LP mode), even with the cassette adaptor.

## Outstanding Picture and Sound Quality

The AJ-SD755's digital component recording assures superb pictures, with a video Y bandwidth of 5.5 MHz and video S/N ratio of 60 dB in digital domain. For audio that surpasses CD quality, it features two 16-bit digital audio channels with 48-kHz sampling. There's also one analog cue track. Using the optional digital interface, both picture and audio quality remain high even after editing and repeated dubbing.

## 184 Minutes Recording/Playback

The AJ-SD755 can use the AJ-5P92LP DVCPRO tape to provide up to 184 minutes of continuous recording and playback, permitting the recording of extended programming onto a single tape cassette for added convenience in production and transmission. For field recording, 66-minute M cassettes can also be utilized without the need for an adaptor.

## Illuminated Jog & Shuttle Dial

The ring of the Jog & Shuttle dial lights up in search mode. This, plus the large LCD metering window, gives you easy, precise operation. In shuttle mode, you can search in colour at  $\pm 32$  times normal speed. Slow-motion playback is provided at  $-0.43$  to  $+0.43$ ,  $+0.5$ ,  $+0.75$  times normal speed in DVCPRO. Digital audio monitoring is possible in jog mode.

## Complete Editing Functions

The AJ-SD755 features an edit control panel and provides functions such as assemble editing, insert editing, preview, review, and trim. Single-event editing and audio split are also possible, using the RS-422A control interface and a standard editing controller.

\*Editing cannot be done in the DV record mode.

## UMID Data Recording and Playback

The AJ-SD755 records and plays data that conforms to the UMID standard and contains a variety of supplementary information. This allows it to read GPS data (latitude, longitude and altitude) recorded by the AJ-SDX900 Camera-Recorder. The AJ-SD755 can also handle VANC data for broadcast such as Teletext.

## Full Digital Interfaces

- IEEE1394: Input/output of IEEE1394 (FireWire) is possible with the optional AJ-YAD755G board. Automatic DVCPRO/DV conversion function allows IEEE 1394 interfacing while recording or playing back DVCPRO to or from a DV machine. Ideal for making inexpensive copies for clients or for uploading/downloading of digital video with a Windows or Macintosh PC.
- SDI In/Out: Serial digital interface (video/audio, SMPTE259M-C/272M) in/out capability with the optional AJ-YA755G board.
- Digital Audio: Equipped with AES/EBU digital audio in/out (BNC connector)
- SDTI is available by adding the optional AJ-YAC930G board, which then allows input/output of SDTI.

## Digital In/Out Signal Adjustment

Users can adjust audio recording levels for both analog and digital inputs (AES/EBU, SDI). For convenience, a user can adjust each channel while watching the level meter display. Adjusting the output images from a third party remote signal controller such as Vue-Tech, Buf Technologies or DNF is done the same way for digital output (SDI) as for analog signals. The AJ-SD755 greatly improves ease of use with digital interfaces.

## Light Weight, Low Power Consumption

With a compact 4U rack height and a weight of only about 33.1 lbs, the AJ-SD755 mounts easily in a 19-inch rack using the optional AJ-MA75P\* rack mount adaptor. Its low power consumption (110 W) is an advantage in both the studio and an OB van.

\*Slide rail not included.

\*RAK-750 will supply the Rack Ears and rack rails, not available in some areas.

## Outstanding System Versatility

- Analog In/Out: Component/composite video and analog audio, allowing direct connection to existing analog systems.
- RS-422A (9-pin): For interfacing with a system that includes an editing controller.
- RS-232C (25-pin): For PC applications.
- Encoder (15-pin): For remote adjustment of the video signal.
- Parallel (25-pin): For general-purpose remote control.
- The On-Screen Menu Display permits a user to easily change many initial settings.
- World-wide Voltage support (AC 100 to 240 V  $\pm 10\%$ , 50 to 60Hz).





**AJ-YAD755G**  
IEEE1394 Interface Board



**AJ-YA755G**  
SDI Board



**AJ-YAC930G**  
SDTI Board



**AJ-MA75P**  
Rack Mount Asaptor  
(slide rail, not included)

S P E C I F I C A T I O N S

**[General]**

Power Requirement:	AC 100 to AC 240 V ±10%; 50 to 60 Hz
Power Consumption:	110 W
Operating Temperature:	41 °F to 104 °F (5 °C to 40 °C)
Operating Humidity:	10 % to 80 %
Weight:	33.1 lbs (15.0 kg)
Dimensions (WxHxD):	16-11/16" x 6-7/8" x 16-15/16" (424 x 175.2 x 430 mm)
Recording Format:	DVCPRO/DV
Recording Video Signal:	525i
Recording Audio Signal:	48 kHz 16 bits 2 CH (DVCPRO)
Recording Track:	Digital Video, Digital Audio; Helical Track TC, Sub code area Cue: 1 track CTL: 1 Track
Tape Speed:	33.820 mm/sec. (DVCPRO)
Recording/Playback Time:	Max. 184 min. (DVCPRO/AJ-5P92LP) Max. 66 min. (DVCPRO/AJ-P66MP)
Tape:	Metal Particle
FF/REW Time:	Less than 3 min. (with AJ-5P92LP) Less than 2 min. (with AJ-P66MP)
Digital Slow Motion:	-0.43 to +0.43 +0.5 +0.75 (DVCPRO)
Editing Accuracy:	±0 frame (TC)
Tape Timer Accuracy:	±1 frame (CTL)
Servo Lock Time:	Less than 0.5 sec. (color framing/standby ON)

**[Video]**

Sampling Frequency:	Y: 13.5 MHz, PB/PR: 3.375 MHz (DVCPRO)
Quantization:	8 bits
Compression Method:	DV-Based Compression (SMPTE314M)
Compression Ratio:	1/5 (DVCPRO)
Error Correction:	Read-solomon product code
Bit Rate:	25 Mbps (DVCPRO)
<b>[Digital In (option)/Analog Component Out]</b>	
Bandwidth:	Y: 30 Hz to 5.75 MHz (±0.5 dB) PB/PR: 30 Hz to 1.3 MHz (±0.5 dB) 1.5 MHz (-5 dB)
S/N:	60 dB or more (Y)
K Factor:	1 % or less (Y 2T)
<b>[Analog Component In/Analog Component Out]</b>	
Bandwidth:	Y: 30 Hz to 5.5 MHz (±1.0 dB) 5.75 MHz (-2.0 dB) PB/PR: 30 Hz to 1.3 MHz (±1.0 dB) 1.5 MHz (-5 dB)
S/N:	55 dB or more
K Factor:	1 % or less (Y 2T)
Y/PB, PR Delay:	20 nsec or less
<b>[Analog Composite In/Analog Composite Out]</b>	
Bandwidth:	Y: 30 Hz to 4.5 MHz (±1.0 dB), 5.5 MHz (-3.0 dB)
Y/C Delay:	20 nsec or less

**[Processor adjustment range (Video Out)]**

Video Gain:	±3 dB
Chroma Gain:	±3 dB
HUE:	±30 °
Set Up:	±14 IRE
Sync phase:	±15 μ sec.
SC phase:	±180 °

**[Audio]**

Sampling Frequency:	48 kHz (sync. With video)
Quantization:	16 bits
Frequency Response:	20 Hz to 20 kHz ± 1.0 dB (reference level)
Dynamic Range:	More than 90 dB (1 kHz, emphasis off, 'A' weighted)
Distortion:	within 0.05 % (1 kHz, emphasis off, reference level)
Cross Talk:	Less than -80 dB (1 kHz, between 2channels)
Wow & Flutter:	Below measurable limit
Headroom:	20 dB
De-Emphasis:	T1 = 50 μsec, T2 = 15 μsec (ON/OFF Auto)
Cue Track:	300 Hz to 6 kHz, +3/-5 dB

**[Video Input]**

Analog Component:	BNC x 3 (Y,PB,PR) Y: 1.0 Vp-p, 75 Ω PB/PR: 0.486/0.7 Vp-p switchable, 75 Ω (75 % color bar, 7.5 % set up)
Analog Composite:	BNC x 2, loop-through, 75 Ω On/Off Video: 1.0 Vp-p, 75 Ω
Reference:	Analog Composite BNC x 2, loop-through, 75 Ω On/Off
SDI (option):	BNC x 2, Active-through SMPTE259M-C
SDTI (option):	BNC x 2, Active-through SMPTE305M/321M

**[Video Output]**

Analog Component:	BNC x 3 (Y,PB,PR) Y: 1.0 Vp-p 75 Ω PB/PR: 0.486/0.7 Vp-p switchable, 75 Ω (75 % color bar, 7.5 % set up)
Analog Composite:	BNC x 3 Video1/Video2: Video/WFM switchable Video3: Super On/Off
SDI (option):	BNC x 3, SMPTE259M-C SDI1, SDI2, SDI3: Super On/Off
SDTI (option):	BNC x 1 SMPTE305M/321M

**[Audio Input]**

Analog (CH1/CH2):	XLR x 2, 600 Ω/high-impedance switchable +4/0/-20 dBu
Digital (CH1/CH2):	BNC x 1, AES/EBU
SDI (option):	BNC, 75 Ω, SMPTE259M-C/272M-A

**[Audio Output]**

Analog (CH1/CH2):	XLR x 2, low-impedance, +4/0/-20 dBu
Digital (CH1/CH2):	BNC x 1, AES/EBU, 1.0 ± 0.2 Vp-p, 75 Ω
SDI (option):	BNC, 75 Ω, SMPTE259M-C/272M-A
Monitor:	XLR x 2, low-impedance, +4/0/-20 dBu switchable
Headphone:	M3, variable level control, 8 Ω

**[Others]**

IEEE1394 (option):	6 pin x 1, IEEE1394-1995
Time Code Input:	XLR x 1, 0.5 to 8 Vp-p, 10 kΩ
Time Code Output:	XLR x 1, 2.0 ± 0.5 Vp-p, low-impedance
RS-422A Input:	D-sub 9 pin RS-422A I/F
RS-422A Output:	D-sub 9 pin RS-422A I/F
RS-232C:	D-sub 25 pin RS-232C /F
Parallel IN/OUT:	D-sub 25 pin
Encoder Remote In:	D-sub 15 pin

Weight and dimensions shown are approximate.  
Features and specifications are subject to change without notice.  
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# Panasonic

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